

Claim Amendments

1. (canceled).

2. (currently amended) An apparatus according to Claim 1 for storing a plurality of supports having a plurality of chemical compounds bound thereto at individual sites thereon, said apparatus comprising:

(a) a mechanism for diffusively introducing pressurized gas into said apparatus,

(b) an outlet element in fluid communication with said mechanism, said outlet element comprising a plurality of openings therein,

(c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber and said supports being disposed such that gas flow through and out of said holding chamber is substantially unidirectional and substantially parallel to said supports, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a plurality of holding elements for holding said supports, and

(d) comprising a flow-straightening element disposed in fluid communication between said outlet element and said holding chamber.

3. (currently amended) An apparatus according to Claim 2 wherein said mechanism comprises one or more gas inlets and a manifold comprising one or more compartments, each of said compartments being in fluid communication with one or more gas inlets.

4. (original) An apparatus according to Claim 3 wherein said gas inlets are substantially perpendicular to the axis of said openings in said outlet element.

5. (currently amended) An apparatus according to Claim 1 for storing a plurality of supports having a plurality of chemical compounds bound thereto at individual sites thereon, said apparatus comprising:

(a) a mechanism for diffusively introducing pressurized gas into said apparatus,

(b) an outlet element in fluid communication with said mechanism, said outlet element comprising a plurality of openings therein, and

(c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber and said supports being disposed such

that gas flow through and out of said holding chamber is substantially unidirectional and substantially parallel to said supports, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a plurality of holding elements for holding said supports, wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.

6. (currently amended) An apparatus for storing a plurality of supports having a plurality of biopolymers bound thereto at individual sites thereon, said apparatus comprising:

(a) a manifold comprising one or more compartments, each of said compartments being in fluid communication with at least one gas inlet for introducing pressurized gas into said apparatus, wherein said gas inlets are positioned in said manifold such that gas is introduced into said manifold in a direction that is substantially normal to the direction of gas exiting said manifold,

(b) an outlet element in fluid communication with said manifold, said outlet element comprising about 10 to about 50 openings per square inch ~~a plurality of openings therein,~~ and

(c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber and said supports being disposed such that gas flow through and out of said holding chamber is substantially unidirectional and substantially parallel to said supports, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a plurality of holding elements for holding said supports.

7. (original) An apparatus according to Claim 6 wherein each of said gas inlets comprises a valve.

8. (previously presented) An apparatus according to Claim 6 wherein said manifold is adapted for introduction of gas at a pressure of about 60 to about 80 psi.

9. (currently amended) An apparatus according to Claim 6 wherein said outlet element is about 0.2 to about 2 inches thick ~~and comprises about 10 to about 50 openings per square inch.~~

10. (original) An apparatus according to Claim 6 wherein the diameter of each of said

openings is about 0.03 to about 0.25 inches.

11. (original) An apparatus according to Claim 6 wherein said outlet element is about 0.02 to about 0.2 inches thick and said apparatus comprises a flow-straightening element disposed in fluid communication between said outlet element and said chamber.

12. (original) An apparatus according to Claim 11 wherein said flow-straightening element is a honeycomb element.

13. (original) An apparatus according to Claim 12 wherein the ratio of length of said honeycomb element to honeycomb features is at least about 7 to 1.

14. (original) An apparatus according to Claim 12 wherein the thickness of said honeycomb element is about 1 to about 1.5 inches.

15. (original) An apparatus according to Claim 6 wherein said gas inlets are substantially perpendicular to the axis of said openings in said outlet element.

16. (previously presented) An apparatus according to Claim 6 wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.

Claims 17-57 (canceled).

58. (previously presented) An apparatus for storing a plurality of supports having a plurality of chemical compounds bound thereto at individual sites thereon, said apparatus comprising:

- (a) a mechanism for diffusively introducing pressurized gas into said apparatus,
- (b) an outlet element in fluid communication with said mechanism, said outlet element comprising a plurality of openings therein,
- (c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber being disposed such that gas flow therethrough is substantially uniform, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a

plurality of holding elements for holding said supports, and

(d) a flow-straightening element disposed in fluid communication between said outlet element and said holding chamber.

59. (previously presented) An apparatus according to Claim 58 wherein said mechanism comprises one or more gas inlets and a manifold comprising one or more compartments, each of said compartments being in fluid communication with one or more gas inlets.

60. (previously presented) An apparatus according to Claim 59 wherein said gas inlets are substantially perpendicular to the axis of said openings in said outlet element.

61. (previously presented) An apparatus according to Claim 58 wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.

62. (currently amended) An apparatus for storing a plurality of supports having a plurality of biopolymers bound thereto at individual sites thereon, said apparatus comprising:

(a) a manifold comprising one or more compartments, each of said compartments being in fluid communication with at least one gas inlet for introducing pressurized gas into said apparatus, wherein said gas inlets are positioned in said manifold such that gas is introduced into said manifold in a direction that is substantially normal to the direction of gas exiting said manifold and wherein each of said gas inlets comprises a valve,

(b) an outlet element in fluid communication with said manifold, said outlet element comprising about 10 to about 50 openings per square inch ~~a plurality of openings therein, and~~

(c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber being disposed such that gas flow through and out of said holding chamber is substantially unidirectional and parallel to said supports, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a plurality of holding elements for holding said supports, and

(d) a flow-straightening element disposed in fluid communication between said outlet element and said chamber.

63. (previously presented) An apparatus according to Claim 62 wherein said manifold is adapted for introduction of a gas at a pressure of about 60 to about 80 psi.

64. (currently amended) An apparatus according to Claim 62 wherein said outlet element is about 0.2 to about 2 inches thick ~~and comprises about 10 to about 50 openings per square inch.~~

65. (previously presented) An apparatus according to Claim 62 wherein the diameter of each of said openings is about 0.03 to about 0.25 inches.

66. (currently amended) An apparatus according to Claim 62 wherein said outlet element is about 0.02 to about 0.2 inches thick and ~~said apparatus comprises a flow-straightening element disposed in fluid communication between said outlet element and said chamber~~ wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.

67. (previously presented) An apparatus according to Claim 66 wherein said flow-straightening element is a honeycomb element.

68. (previously presented) An apparatus according to Claim 67 wherein the ratio of length of said honeycomb element to honeycomb features is at least about 7 to 1.

69. (previously presented) An apparatus according to Claim 67 wherein the thickness of said honeycomb element is about 1 to about 1.5 inches.

70. (previously presented) An apparatus according to Claim 62 wherein said gas inlets are substantially perpendicular to the axis of said openings in said outlet element.

71. (previously presented) An apparatus according to Claim 62 wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.

72. (previously presented) An apparatus for storing a plurality of supports having a plurality of biopolymers bound thereto at individual sites thereon, said apparatus comprising:

(a) a manifold comprising one or more compartments, each of said compartments being in fluid communication with at least one gas inlet for introducing pressurized gas into said apparatus, wherein said gas inlets are positioned in said manifold such that gas is introduced into said manifold in a direction that is substantially normal to the direction of gas exiting said manifold,

(b) an outlet element in fluid communication with said manifold, said outlet element comprising a plurality of openings therein, and

(c) a holding chamber for said supports in fluid communication with said outlet element, said outlet element and said holding chamber being disposed such that gas flow therethrough is substantially unidirectional, said holding chamber comprising an opening sufficient to permit movement of said supports to and from said holding chamber and comprising a plurality of holding elements for holding said supports, and

(d) a flow-straightening element disposed in fluid communication between said outlet element and said chamber.

73. (previously presented) An apparatus according to Claim 72 wherein each of said gas inlets comprises a valve.

74. (previously presented) An apparatus according to Claim 72 wherein said outlet element is about 0.2 to about 2 inches thick and comprises about 10 to about 50 openings per square inch.

75. (previously presented) An apparatus according to Claim 72 wherein the diameter of each of said openings is about 0.03 to about 0.25 inches.

76. (previously presented) An apparatus according to Claim 72 wherein said outlet element is about 0.02 to about 0.2 inches thick.

77. (previously presented) An apparatus according to Claim 72 wherein said flow-straightening element is a honeycomb element.

78. (previously presented) An apparatus according to Claim 77 wherein the ratio of length of said honeycomb element to honeycomb features is at least about 7 to 1.

79. (previously presented) An apparatus according to Claim 77 wherein the thickness of said honeycomb element is about 1 to about 1.5 inches.

80. (previously presented) An apparatus according to Claim 72 wherein said gas inlets are substantially perpendicular to the axis of said openings in said outlet element.

81. (previously presented) An apparatus according to Claim 72 wherein said holding elements for said supports are adapted to hold said supports in a substantially vertical position.